



Evaluation of KIWC West Oahu Farrington Highway Escalation Costs December 17, 2015

WOFH Provisional Sum

- Originally presented to HART Board on November 13, 2014
- Total delay 33 months
- HART and Kiewit could not come to an equitable agreement for escalation payment
- Original provisional sum estimated to cover first 21 months
- HART and Kiewit agreed escalation would be based on actual escalation realized on:
 - Craft labor
 - Staff labor
 - Fuel, oil, grease (FOG)
 - Small tools, supplies and other consumables
 - Ready-mix concrete
- Provisional sum changed order developed based on AIS Suspension Provisional Sum Protocol

WOFH Contract Delay

The following events delayed the WOFH DB Contract:

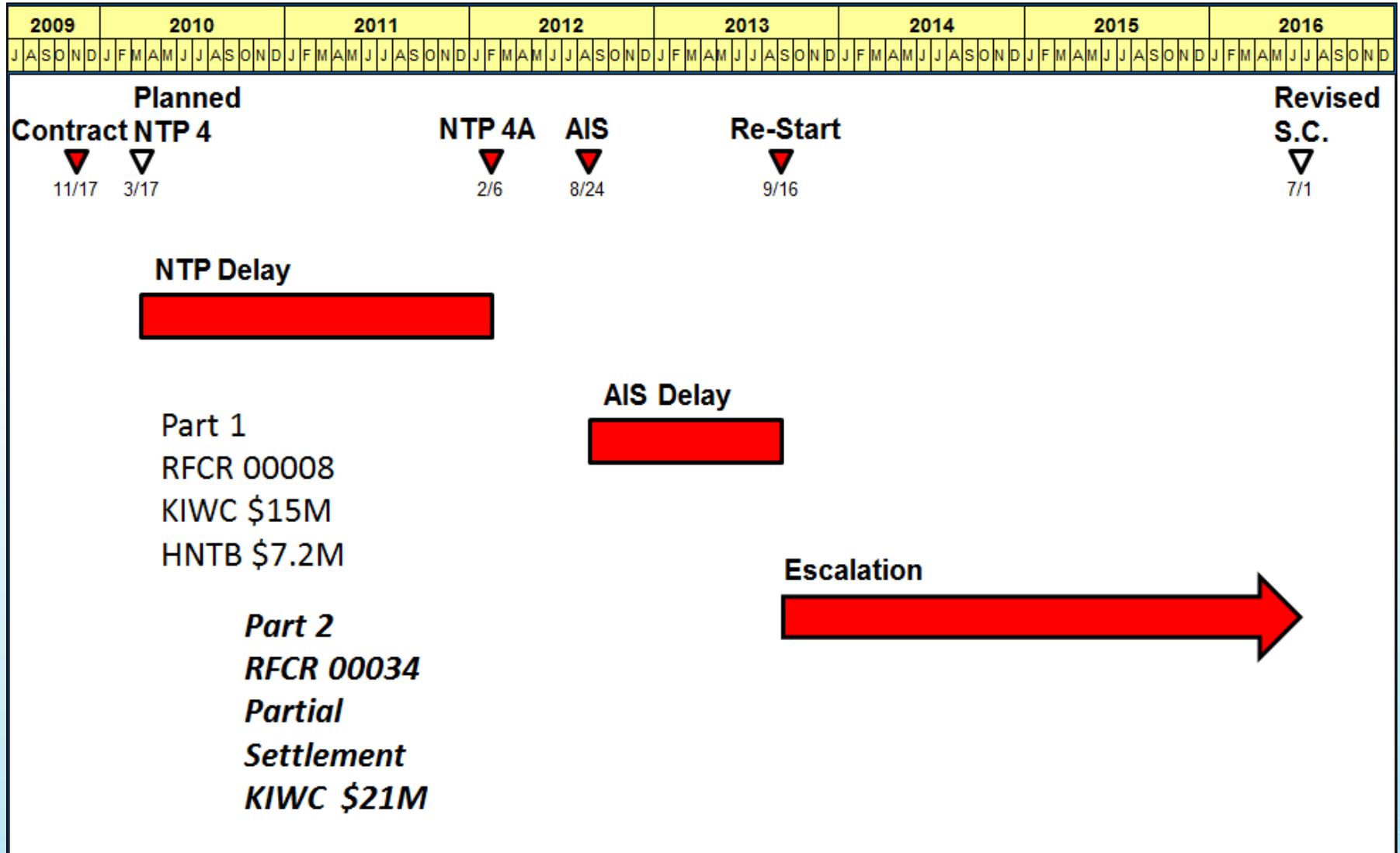
- The delayed issuance of NTP 2, 3, & 4
- Program's construction was halted due to court ruling requiring completion of the Archeological Investigative Survey (AIS)

Resolution of the cost with KIWC due to delay were stagnated. A path forward was developed to come to an equitable adjustment with KIWC. It consisted of:

- Complete the AIS Audit, Develop Provisional Sum Change Orders, and Individual Item Evaluation
- All other issues with WOFH contract are resolved within change orders issued
- This is the second provisional sum change order for actual escalation.

Initial Claim submitted on September, 2013 and settled July, 2015.

WOFH Contract Delay Overview



Cost Escalation

- Escalation is the increase in the cost of goods and services over a defined period of time. This includes the cost of labor and materials due to market forces.
- In the case of the WOFH contract the original time period in which the construction was anticipated to be accomplished was extended due to AIS and NTP delays. This has resulted in increased costs of construction in a later period of time than originally anticipated.

West Oahu/Farrington Highway Escalation Due to Schedule Impacts

- \$15,000,000
 - Provisional sum change order 48 executed for escalation costs due to delays
 - Based on 13 months of AIS delays and 20 months of NTP delays
 - Wage rate increases for craft and staff labor; fuel, oil, and grease including repair parts; small tools and supplies including consumables; and Ready-Mix Concrete
 - Provisional sum forecast for 21 of 33 months through June 30, 2015
 - Funded through unallocated contingency

WOFH Escalation Settled

Sub-Contractors and Suppliers	Original KIWC Estimate	Settled Amount	Cost Delta
Ameron for aggregate	\$476,370	\$464,413	(\$11,957)
Tensar Intl. for MESA blocks	\$72,474	\$71,663	(\$811)
T Bailey, Inc. for permanent shaft casing	\$188,356	\$102,675	(\$85,681)
Schwager Davis for post tensioning components	\$961,701	\$767,177	(\$194,524)
PAC Electric	\$1,154,070	\$777,883	(\$376,187)
Road Builders	\$746,176	\$716,665	(\$29,511)
HPD Spec. Duty	\$160,936	\$156,123	(\$4,813)
Honolulu Paint	\$22,137	\$21,476	(\$661)
Kiewit Equipment	\$2,586,642	\$746,176	(\$1,840,466)
CMC - Rebar	<u>\$9,414,474</u>	<u>\$6,228,445</u>	<u>(\$3,186,029)</u>
Total Settled	\$15,783,336	\$10,052,696	(\$5,730,640)

Provisional Sum Protocols to Determine Actual Escalation

Establish Escalation protocols to determine actual costs realized for the following:

- Staff Labor
- Craft Labor
- Fuel, Oil, and Grease (FOG)
- Concrete
- Small Tools and Supplies (ST&S) and Undefined Consumables

Protocols for determining actual escalation costs mutually agreed upon

HART reviews billing for conformance

Staff Escalation

Step 1: Build Staff Rate Table

Effective Start	Effective End	ID	Name	Weekly Base Wage	Year	COLA	COLA Amount	Type	Payroll Tax	Payroll Insurance	PTO	Med /Dis/ Dental/ Life	401k	Weekly Fringe	Total Weekly Rate	Total Hourly Rate
9/16/2011	4/1/2012	302846	STAFF NAME	\$1,105	2011	30%	\$332	Taxable	\$0.0825	\$0.0072	\$0.0772	\$175.38	\$76.38	\$491.51	\$1,928.01	\$48.20
4/2/2012	6/30/2012	302846		\$1,125	2012	30%	\$338	Taxable	\$0.0825	\$0.0072	\$0.0772	\$175.38	\$76.38	\$495.85	\$1,958.35	\$48.96
7/1/2012	8/12/2012	302846		\$1,125	2012	30%	\$338	Base	\$0.1111	\$0.0136	\$0.1354	\$0.1715	\$0.0625	\$555.86	\$2,018.36	\$50.46
8/13/2012	3/17/2013	302846		\$1,125	2012	30%	\$338	Base	\$0.1111	\$0.0136	\$0.1354	\$0.1715	\$0.0625	\$555.86	\$2,018.36	\$50.46
3/18/2013	7/7/2013	302846		\$1,160	2013	40%	\$464	Base	\$0.1111	\$0.0136	\$0.1354	\$0.1715	\$0.0625	\$573.16	\$2,197.16	\$54.93
7/8/2013	3/16/2014	302846		\$1,160	2013	40%	\$464	Base	\$0.1263	\$0.0089	\$0.1668	\$0.1127	\$0.0528	\$542.30	\$2,166.30	\$54.16
3/17/2014	7/6/2014	302846		\$1,205	2014	40%	\$482	Base	\$0.1263	\$0.0089	\$0.1668	\$0.1127	\$0.0528	\$563.34	\$2,250.34	\$56.26
7/7/2014	1/8/2015	302846		\$1,205	2014	40%	\$482	Base	\$0.1201	\$0.0089	\$0.1224	\$0.1253	\$0.058	\$523.81	\$2,210.81	\$55.27

Step 2: Build an Exclusion Table

Staff is verified for involvement with WOFH Project.

FARRINGTON GUIDEWAY	WBS	UserD7	Exclude for Staff	Exclude for Craft	Exclude for Undefined	Exclude for Concrete	Exclude for Equipment	Code match
Financial Results Analysis								100146.1000
CCO 42 BWS IMPACT - KUALAKAI [WATER]	1298	Change Orders	Yes	Yes	Yes	Yes	Yes	100146.1233
CCO 42 CONCRETE JACKET - KUALAKAI [WATER]	1299	Change Orders	Yes	Yes	Yes	Yes	Yes	100146.1234
BUILDERS RISK EVENTS	3402	Indirects	Yes	Yes	Yes	Yes	Yes	100146.2481
OCIP GENERAL LIAB DEDUCTIBLE	3403	Indirects	Yes	Yes	Yes	Yes	Yes	100146.2482
OCIP SUBCONTRACTOR HIGHER LIM	3404	Indirects	Yes	Yes	Yes	Yes	Yes	100146.2483

Step 3: Download payroll data from Kiewit's accounting program

NAME & ADDRESS	EMPLOYEE#		SOC. SEC. NO						TOT HOUR	TY HR	BASE RATE		
	NO. OF EXM	HOURS WORKED THIS JOB											
			0908	0909	0910	0911	0912	0913				0914	
FRRNG07 Default Level			8.00	8.00	8.00	8.00	8.00	8.00	0.00	0.00	40.00	ST	30.1250

Contractor provides Staff Payroll as backup and hours are backchecked against Staff Escalation spreadsheet.

Rates are compared to the rates 24 months prior

Step 4: Calculate rate difference & Step 5: Summarize

Last name First name	Date	Base Pay Rate	Att./Absence type	Hours	Pay Type	Years of Escalation	Prior Date (Date - Years of Escalation)	Current Rate ST	Current Rate OT	Prior Rate ST	Prior Rate OT	Escalation Per HR ST	Escalation Per HR OT	Escalation Amount	Billable	Billing Month
STAFF NAME	3/13/2014	\$29.0000	1000	8.000	ST	2	3/13/2012	\$54.16	\$ -	\$48.20	\$ -	\$5.96	\$ -	\$47.66	Yes	07 Mar - 2014
	3/14/2014	\$29.0000	1000	8.000	ST	2	3/14/2012	\$54.16	\$ -	\$48.20	\$ -	\$5.96	\$ -	\$47.66	Yes	07 Mar - 2014
	3/17/2014	\$30.1250	1000	8.000	ST	2	3/17/2012	\$56.26	\$ -	\$48.20	\$ -	\$8.06	\$ -	\$64.47	Yes	07 Mar - 2014
	3/18/2014	\$30.1250	1000	8.000	ST	2	3/18/2012	\$56.26	\$ -	\$48.20	\$ -	\$8.06	\$ -	\$64.47	Yes	07 Mar - 2014
	7/7/2014	\$30.1250	1000	8.000	ST	2	7/7/2012	\$55.27	\$ -	\$50.46	\$ -	\$4.81	\$ -	\$38.49	Yes	11 July - 2014
	7/8/2014	\$30.1250	1000	8.000	ST	2	7/8/2012	\$55.27	\$ -	\$50.46	\$ -	\$4.81	\$ -	\$38.49	Yes	11 July - 2014

Craft Labor Escalation

Step 1: Build Rate Comparison Tables

Step 3: Pull in wage differences

		EFFECTIVE SEPTEMBER 1, 2013 THROUGH PRESENT													EFFECTIVE OCTOBER 4, 2010 THROUGH FEBRUARY 18, 2011													
CRAFT CODE	DESCRIPTION	RATE OF PAY	TAXABLE	FRINGE VAC/DUES	STAB/IND	H&W	PENS.	ANNUITY	TRNG	ADM FEE	TOTAL NON-TAX FRINGE	INS TAX % 13.62%	COST	RATE OF PAY	FRINGE VAC/DUES	TAXABLE	STAB/IND	H&W	PENS.	ANNUITY	TRNG	ADM FEE	TOTAL NON-TAX FRINGE	INS TAX % 8.22%	COST	DELTA		
201	LABORER GRP 1	ST	\$32.30	\$32.30	\$2.78	\$0.250	\$5.60	\$3.12	\$4.01	\$0.45	\$0.145	\$16.36	\$4.37	\$63.05	\$29.30	\$2.73	\$32.03	\$0.150	\$5.60	\$3.12	\$4.01	\$0.45	\$0.145	\$13.48	\$2.95	\$48.46	\$4.67	
201		OT	\$48.45	\$48.45	\$2.78	\$0.250	\$5.60	\$3.12	\$4.01	\$0.45	\$0.145	\$16.36	\$6.55	\$71.96	\$43.95	\$2.73	\$46.68	\$0.150	\$5.60	\$3.12	\$4.01	\$0.45	\$0.145	\$13.48	\$4.30	\$84.46	\$6.80	
201		OT	\$64.60	\$64.60	\$2.78	\$0.250	\$5.60	\$3.12	\$4.01	\$0.45	\$0.145	\$16.36	\$8.73	\$89.99	\$59.60	\$2.73	\$61.33	\$0.150	\$5.60	\$3.12	\$4.01	\$0.45	\$0.145	\$13.48	\$6.65	\$99.46	\$9.29	
101	OPERATOR GRP A-1	ST	\$36.44	\$36.44	\$5.93	\$0.535	\$8.89	\$11.39	\$0.00	\$1.35	\$1.00	\$29.10	\$4.93	\$70.47	\$33.69	\$4.88	\$38.57	\$0.54	\$8.44	\$9.14	\$0.00	\$1.35	\$1.00	\$20.47	\$3.95	\$82.60	\$7.67	
101		OT	\$54.66	\$54.66	\$5.93	\$0.535	\$8.89	\$11.39	\$0.00	\$1.35	\$1.00	\$29.10	\$7.39	\$91.16	\$50.54	\$4.88	\$55.42	\$0.54	\$8.44	\$9.14	\$0.00	\$1.35	\$1.00	\$20.47	\$5.11	\$89.96	\$10.16	
101		DT	\$72.88	\$72.88	\$5.93	\$0.535	\$8.89	\$11.39	\$0.00	\$1.35	\$1.00	\$29.10	\$9.85	\$111.83	\$67.38	\$4.88	\$72.26	\$0.54	\$8.44	\$9.14	\$0.00	\$1.35	\$1.00	\$20.47	\$6.66	\$99.38	\$12.44	
601	CARPENTER	ST	\$40.75	\$40.75	\$5.25	\$0.07	\$7.85	\$6.45	\$0.71	\$0.67	\$0.095	\$21.30	\$5.51	\$67.66	\$36.20	\$5.25	\$41.45	\$0.05	\$7.20	\$6.20	\$0.78	\$0.77	\$0.095	\$15.10	\$3.82	\$80.37	\$7.19	
601		OT	\$61.13	\$61.13	\$5.25	\$0.07	\$7.85	\$6.45	\$0.71	\$0.67	\$0.095	\$21.30	\$8.26	\$90.88	\$54.30	\$5.25	\$59.55	\$0.05	\$7.20	\$6.20	\$0.78	\$0.77	\$0.095	\$15.10	\$5.49	\$80.14	\$10.66	
601		DT	\$81.50	\$81.50	\$5.25	\$0.07	\$7.85	\$6.45	\$0.71	\$0.67	\$0.095	\$21.30	\$11.02	\$113.82	\$72.40	\$5.25	\$77.65	\$0.05	\$7.20	\$6.20	\$0.78	\$0.77	\$0.095	\$15.10	\$7.16	\$89.81	\$13.81	
810	ELECTRICIAN JOURNEYMAN	ST	\$41.55	\$41.55	\$4.82	\$1.25	\$6.25	\$6.15	\$6.65	\$0.50	\$0.30	\$25.92	\$5.62	\$73.09	\$39.75	\$4.61	\$44.36	\$1.193	\$6.15	\$6.15	\$6.00	\$6.36	\$0.25	\$0.25	\$20.20	\$4.09	\$88.96	\$4.44
810		OT	\$62.33	\$62.33	\$4.82	\$1.87	\$6.25	\$6.15	\$6.65	\$0.50	\$0.30	\$26.54	\$8.43	\$97.30	\$59.63	\$4.61	\$64.24	\$1.789	\$6.15	\$6.00	\$6.36	\$0.25	\$0.25	\$20.80	\$5.52	\$90.96	\$6.54	
810		DT	\$83.10	\$83.10	\$4.82	\$2.49	\$6.25	\$6.15	\$6.65	\$0.50	\$0.30	\$27.16	\$11.24	\$121.60	\$79.50	\$4.61	\$84.11	\$2.385	\$6.15	\$6.00	\$6.36	\$0.25	\$0.25	\$21.40	\$7.76	\$113.27	\$8.23	

Step 2: Gather man hour data and distribute

Date Range: 10/1/2013 - 10/31/2013
 Project Name: Farrington Guideway
 Plan Description: R/CCA - 10/29/2013 - E/L/B 20" WATER
 Plan ID Number: C8E00037745B4FF165E16016E1D45C88

Sup't's Name: Timothy Knott
 Engineer: Michael Neal
 Foreman: Joshua Roca

Plan Status: Final - Complete
 Plan Date: 10/29/2013
 Location: FH STA 77+78 - 75+60
 Shift: Third Shift

Employee Hours - Final - Complete

WBS #	WBS Description	Employee #	First Name	Last Name	Craft Description	ST Hours	OT Hours	DT Hours	Other Hours	Total Hours
100146.4267	B/F STREET [WATER]	00151016	Ronald	Colburn	Operator Group 7	5.0	2.0	0.0	0.0	7.0
		00197811	Renee	Hoomanawanui	Laborer Foreman	7.0	0.5	0.0	0.0	7.5

Labor rates are backchecked against Master Agreement labor rates and fringe benefits for each Craft

Labor rates are compared to the same month 36 months prior

Contactor submits Plan History Craft Hours and spot checks are done to verify hours translate correctly onto Man Hour Data Table

Personnel Number	Craft Code	Last name First name	WBS Element	ACTIVITY	Cost Element	Document Date	Excluded from Direct Calc	Reg Lab MH	OT Lab MH	DT Lab MH
159729	201	KANAE JR, STANLEY JAMES	100146.1026	FH CLOSURES [MOT] - DELETE	810110	9/17/2013	N	3.000		
329737	201	ELI, COTY	100146.1040	MAINTAIN KRAIL - FH (24 Mo) [STRUCT ACCE	810110	12/11/2013	N		1.000	
197811	201	HOOMANAWANUI, RENEE	100146.4267	B/F STREET [WATER]	810110	10/29/2013	N	7.000		
329737	201	ELI, COTY	100146.4267	B/F STREET [WATER]	810110	10/9/2013	N		1.500	
182919	601	LIUA, PA'U	100146.1822	ASSEMBLE/DEMOBE FORMS [PRECAST YARD SETU	810110	9/25/2013	N	8.000		
182919	601	LIUA, PA'U	100146.1822	ASSEMBLE/DEMOBE FORMS [PRECAST YARD SETU	810110	9/25/2013	N		1.000	
304021	601	VANDIKE, KENNETH	100146.1822	ASSEMBLE/DEMOBE FORMS [PRECAST YARD SETU	810110	12/13/2013	N	8.000		
304021	601	VANDIKE, KENNETH	100146.1822	ASSEMBLE/DEMOBE FORMS [PRECAST YARD SETU	810110	12/14/2013	N		7.000	
330784	810	DURAN, CARLOS	100146.1580	INSTALL LICENSE PLATE READER	810110	10/18/2013	N	8.000		
330784	810	DURAN, CARLOS	100146.1580	INSTALL LICENSE PLATE READER	810110	10/18/2013	N		0.500	

Activities are reviewed to verify that only activities aligned with the Craft Labor Escalation Agreement are being billed

Step 4: Calculate escalation

		WOFH Labor	STRAIGHT TIME			OVERTIME			DOUBLE TIME		
Craft Code	Craft Description	WOFH 4th Qtr 2013 Total MH	2013 ST Lab MH	Labor Difference to 4th Qtr 2010	Escalation from 2010 to 2013	2013 OT Lab MH	Labor Difference to 4th Qtr 2010	Escalation from 2010 to 2013	2013 DT Lab MH	Labor Difference to 4th Qtr 2010	Escalation from 2010 to 2013
Craft Labor Costs 9/16/13 to 12/31/13 - Excluding CCO Work and B/C											
201	Laborer Group 1	9,411.50	8,134.00	\$4.57	\$37,172.38	1,276.00	\$6.90	\$8,804.40	1.50	\$9.23	\$13.85
601	Carpenter	3,373.00	3,168.00	\$7.19	\$22,777.92	205.00	\$10.55	\$2,162.75	0	\$13.91	\$0
810	Elect Journeyman	558.00	533.50	\$4.44	\$2,368.74	18.00	\$6.34	\$114.12	6.50	\$8.23	\$53.50

Fuel Escalation

Step 1: Gather price history for fuel purchased (differentiate by Unleaded, Clear Diesel, Dyed Diesel and by quarter for comparison)

2011Q4		
	Sum of Total quantity (Gallons)	Average of Ave Unit Price (\$/GAL)
2011Q4	6,963.16	\$4.01
CLEAR DIESEL	1,009.82	\$4.59
Bulk	772.00	\$4.24
Pump	237.82	\$4.70
DYED DIESEL	4,852.00	\$3.69
Bulk	4,852.00	\$3.69
UNLEADED	1,101.34	\$3.87
Pump	1,101.34	\$3.87

Average Unit Price for 2011Q4 Clear Diesel Bulk Fuel							
Fuel Type	Additional Detail	Purchase Type	Description	Period	Invoice Amount (\$)	Total quantity (Gallons)	Ave Unit Price (\$/GAL)
CLEAR DIESEL	Garlow Petroleum	Bulk	133363	2011Q4	\$839.53	199	\$4.22
CLEAR DIESEL	Garlow Petroleum	Bulk	132707	2011Q4	\$1,301.42	296	\$4.40
CLEAR DIESEL	Garlow Petroleum	Bulk	132127	2011Q4	\$1,139.58	277	\$4.11
AVERAGE PRICE							\$4.24

Step 2: Gather current fuel purchase data

2013Q4		
	Sum of Total quantity (Gallons)	Average of Ave Unit Price (\$/GAL)
2013Q4	98,994.86	\$4.07
CLEAR DIESEL	5,627.75	\$4.74
Bulk	3,778.00	\$4.78
Pump	1,849.75	\$4.73
DYED DIESEL	80,696.00	\$3.81
Bulk	80,696.00	\$3.81
UNLEADED	12,671.11	\$3.99
Pump	12,671.11	\$3.99

Average Unit Price for 2013Q4 Clear Diesel Bulk Fuel							
Fuel Type	Additional Detail	Purchase Type	INVOICE #	Period	Invoice Amount (\$)	Total quantity (Gallons)	Ave Unit Price (\$/GAL)
CLEAR DIESEL	Oahu Petroleum Inc	Bulk	INV005045	2013Q4	\$4,709.51	974	\$4.84
CLEAR DIESEL	Oahu Petroleum Inc	Bulk	INV003860	2013Q4	\$3,796.32	792	\$4.79
CLEAR DIESEL	Oahu Petroleum Inc	Bulk	INV003434	2013Q4	\$981.55	203	\$4.84
CLEAR DIESEL	Garlow Petroleum Inc	Bulk	INV150472	2013Q4	\$3,093.67	720	\$4.14
CLEAR DIESEL	OAHU PETROLEUM INC	Bulk	INV004611	2013Q4	\$4,214.88	891	\$4.73
CLEAR DIESEL	OAHU PETROLEUM INC	Bulk	INV003137A	2013Q4	\$1,061.04	198	\$5.36
AVERAGE PRICE							\$4.78

Fuel Type	Additional Detail	Type	Invoice	Period	Total QTY (Gal)	Billable
CLEAR DIESEL	OAHU PETROLEUM	Bulk	003137A	2013Q4	198	Yes
CLEAR DIESEL	OAHU PETROLEUM	Bulk	004611	2013Q4	891	Yes
CLEAR DIESEL	Garlow Petroleum	Bulk	150472	2013Q4	720	Yes
CLEAR DIESEL	Oahu Petroleum	Bulk	003434	2013Q4	203	Yes
CLEAR DIESEL	Oahu Petroleum	Bulk	003860	2013Q4	792	Yes
CLEAR DIESEL	Oahu Petroleum	Bulk	005045	2013Q4	974	Yes
					3,778	

Step 3: Calculate differences

Baseline Fuel Data				Fuel Data 2-Years Prior			Escalation Calculation	
Period/Type of Fuel		Original Total Quantity (Gallons)	Average Unit Price (\$/GAL)	Period/Type of Fuel	Total Quantity (Gallons)	Average Unit Price (\$/GAL)	2-Year Delta	Original Escalation Amount
2013Q4	Quarter	Total	\$4.07	2011Q4	6,963.16	\$4.01	2013Q4 vs. 2011Q4	
CLEAR DIESEL			\$4.74	CLEAR DIESEL	1,009.82	\$4.59		
Bulk	2013Q4	3,778.00	\$4.78	Bulk	772.00	\$4.24	\$0.54	\$2,035.09
Pump	2013Q4	1,849.75	\$4.73	Pump	237.82	\$4.70	\$0.03	\$61.11
DYED DIESEL			\$3.81	DYED DIESEL	4,852.00	\$3.69		
Bulk	2013Q4	80,696.00	\$3.81	Bulk	4,852.00	\$3.69	\$0.12	\$9,446.70
UNLEADED			\$3.99	UNLEADED	1,101.34	\$3.87		
Pump	2013Q4	12,671.11	\$3.99	Pump	1,101.34	\$3.87	\$0.11	\$1,440.73

All invoices are reviewed for correct dollar value, number of gallons, and that individuals included for "PUMP CLEAR DIESEL" and "PUMP UNLEADED" are involved with the WOFH Project Only.

Fuel averages are compared to the average of rates 24 months prior

Ready Mix Concrete Escalation

Step 1: Building Exclusion Table

WBS	UserID7	Exclude for Staff	Exclude for Craft	Exclude for Undefined	Exclude for Concrete	Exclude for Equipment
AGGREGATE	Civil			Yes	Yes	
ESCALATION - STAFF LABOR 2012	Indirects	Yes	Yes	Yes	Yes	Yes
CCO 4 - NON-OCIP & BR 12/31/11	Change Orders	Yes	Yes	Yes	Yes	Yes
CCO 6 ADDITIONAL SURVEY	Change Orders	Yes	Yes	Yes	Yes	Yes
Miscellaneous Revenue Internal	Misc Rev	Yes	Yes	Yes	Yes	Yes
PIER 253 ATTENUATOR - 6.6.14	Misc Rev	Yes	Yes	Yes	Yes	Yes
CONCRETE 6000 PSI - SUBSTRUCTURE GENERAL	Deleted	Yes	Yes	Yes	Yes	Yes
CONCRETE 6500 PSI - PRECAST SOUNDWALLS	Deleted	Yes	Yes	Yes	Yes	Yes
SUSPENSION RELATED COST - POTENTIAL PCO	Deleted	Yes	Yes	Yes	Yes	Yes
Financial Results Analysis						
MAINTENANCE DEPT.	Maintenance					
MAINTENANCE	Maintenance					
CIVIL [ALL]	Civil					
CIVIL DIRECT	Civil					
ELECTRICAL [ALL]	Electrical					
ELECTRICAL/COMM/ITS - DIRECT	Electrical					

Step 2: Build Escalation Rate Table

Date	Escalation	Yearly	Escalation	Cum. Escalation
2011	1.0000	4%	0.04	0.04
2012	1.0400	4%	0.0416	0.0816
2013	1.0816	4%	0.043264	0.124864
2014	1.124864	only entitled to 3 years of escalation		
2015	1.124864	only entitled to 3 years of escalation		
2016	1.124864	only entitled to 3 years of escalation		

Agreement:

Concrete Purchased/Delivered 2012 = 4%

Concrete Purchased/Delivered 2013 = 8.16%

Concrete Purchased/Delivered 2014-2016 = 12.49%

Excluded items are verified

Escalation rates are verified and checked for proper incorporation by Document Date

All backup invoices are reviewed to ensure billable items are related to WOFH (Shaft, Column, and Superstructure Ready Mix Concrete) and that invoices match what's included in Concrete Escalation Spreadsheet.

Step 3: Download ZSMM Payment Report and Analyze Concrete Purchasing Data

Document Number	Document Date	Name	Ref No.	HART Review	Fiscal Year	Amount In Invoice	Document Year	Escalation Factor	Unescalated Amount	Escalation Amount	Excluded Date	Excluded Code	Excluded Other (Manual)	Billable	Clearing Month
4000263016	11/12/2013	Ameron International Corporation	389591	4000 PSI Mix	2014	\$9,567.20	2013	1.0816	\$8,845.41	\$721.79		0		Yes	07 Mar - 2014
4000263014	11/13/2013	Ameron International Corporation	389638	4000 PSI Mix	2014	\$15,945.33	2013	1.0816	\$14,742.35	\$1,202.98		0		Yes	07 Mar - 2014
4000263011	11/14/2013	Ameron International Corporation	389691	4000 PSI Mix	2014	\$7,972.67	2013	1.0816	\$7,371.18	\$601.49		0		Yes	07 Mar - 2014
4000274127	11/15/2013	Ameron International Corporation	389731	4000 PSI Mix	2014	\$7,281.94	2013	1.0816	\$6,732.56	\$549.38		0		Yes	08 Apr - 2014
4000274129	12/9/2013	Ameron International Corporation	390453	4000 PSI Mix	2014	\$7,675.56	2013	1.0816	\$7,096.49	\$579.07		0		Yes	08 Apr - 2014
4000274132	12/31/2013	Ameron International Corporation	391088	4000 PSI Mix	2014	\$7,872.37	2013	1.0816	\$7,278.45	\$593.92		0		Yes	08 Apr - 2014
4000254166	12/5/2013	Ameron International Corporation	390333	6500 PSI Mix	2014	\$4,375.97	2013	1.0816	\$4,045.83	\$330.14		0		Yes	07 Mar - 2014
4000274131	12/30/2013	Ameron International Corporation	391066	6500 PSI Mix	2014	\$6,563.96	2013	1.0816	\$6,068.75	\$495.21		0		Yes	08 Apr - 2014
4000263023	10/15/2013	Ameron International Corporation	388498	Flowable Fill CLSM	2014	\$6,285.77	2013	1.0816	\$5,811.55	\$474.22		0		Yes	07 Mar - 2014
4000276520	3/5/2014	Ameron International Corporation	393161	2500 PSI Mix	2014	\$684.32	2014	1.124864	\$608.36	\$75.96		0		Yes	08 Apr - 2014
4000334608	4/23/2014	Ameron International Corporation	394901	2500 PSI Mix	2014	\$855.41	2014	1.124864	\$760.46	\$94.95		0		Yes	10 June - 2014
4000334539	4/29/2014	Ameron International Corporation	395102	2500 PSI Mix	2014	\$855.41	2014	1.124864	\$760.46	\$94.95		0		Yes	10 June - 2014
4000334606	5/2/2014	Ameron International Corporation	395245	2500 PSI Mix	2014	\$513.24	2014	1.124864	\$456.27	\$56.97		0		Yes	10 June - 2014
4000346809	6/2/2014	Ameron International Corporation	396367	2500 PSI Mix	2014	\$8,697.22	2014	1.124864	\$7,715.79	\$981.43		0		Yes	11 July - 2014
4000263928	2/28/2014	Ameron International Corporation	393012	3000 PSI Mix	2014	\$417.81	2014	1.124864	\$371.43	\$46.38		0		Yes	08 Apr - 2014
4000263926	3/4/2014	Ameron International Corporation	393112	3000 PSI Mix	2014	\$1,671.21	2014	1.124864	\$1,485.70	\$185.51		0		Yes	08 Apr - 2014
4000263925	3/5/2014	Ameron International Corporation	393162	3000 PSI Mix	2014	\$1,671.21	2014	1.124864	\$1,485.70	\$185.51		0		Yes	08 Apr - 2014
4000263882	3/6/2014	Ameron International Corporation	393218	3000 PSI Mix	2014	\$1,504.09	2014	1.124864	\$1,337.13	\$166.96		0		Yes	08 Apr - 2014
4000263881	3/8/2014	Ameron International Corporation	393277	3000 PSI Mix	2014	\$2,506.82	2014	1.124864	\$2,228.55	\$278.27		0		Yes	08 Apr - 2014

Undefined Consumables Escalation

Step 1: Build an Exclusion Table

Name	Excluded Vendor	Notes
Ameron International Corporation	Yes	based on CCO 50 (Ameron Agg) and CCO 48 (Ameron Concrete - separate bucket)
CMC Steel Fabricators Inc	Yes	based on CCO XX
Garlow Petroleum Inc	Yes	based on CCO 48 (fuel escalation is separate bucket)
HNTB Corp	Yes	based on CCO XX
Honolulu Police Department	Yes	based on CCO 52
Laborers Local 368	Yes	
Local #830 OPCMA	Yes	
Oahu Petroleum Inc	Yes	based on CCO 48 (fuel escalation is separate bucket)
Pao Electric Co Inc	Yes	based on CCO 57
Pohaku Paa Holdings LLC	Yes	Ameron (bought out by Pohaku)
Road Builders Corp	Yes	based on CCO 54
Schwager Davis Inc	Yes	based on CCO 55
T Bailey Inc	Yes	based on CCO 56
Tensar International Corp	Yes	based on CCO 53

Escalation Percentages are reviewed to verify that the correct percentages are applied per the Undefined Consumable Escalation Agreement:

- 24 Month Escalation (6.09%) – Equipment Related Consumables, Equipment Overhaul, and Indirect Equipment Costs
- 36 Month Escalation (9.27%) – Services Tools & Supplies, Permanent Materials, and Subcontractor Costs Excluding Change Orders 50 to 57

Step 2: Gather purchasing data for the current analysis period, Step 3: Filter data and extract escalation amount, & Step 4: Summarize

Name	Reference	HART Review	Amount in Invoice	Non-Escalated Amount (Amount in LC/Escalation Percent)	Escalation Amount (Amount in LC - Non-Escalated Amount)	Years of Escalation	Escalation Percent	Excluded Vendor	Excluded Code	Billable	Clearing Month
Emedco Co Inc	9322231493	2 in 1 Lookout	\$124.36	\$117.22	\$7.14	2	1.060900	0	0	Yes	05 Jan - 2014
Ace Auto Glass Inc	1418157	Labor to Replace Windshields	\$492.46	\$464.19	\$28.27	2	1.060900	0	0	Yes	08 Feb - 2014
The Lighthouse	0068625	LED Beacon	\$1,582.76	\$1,491.90	\$90.86	2	1.060900	0	0	Yes	14 Oct - 2014
Genie Industries Inc	4485279	Radiator and Belt for Ford	\$200.85	\$189.32	\$11.53	2	1.060900	0	0	Yes	15 Nov - 2014
Worthington Military Construction	5120	10' x 10' Hole Covers	\$4,670.16	\$4,273.86	\$396.30	3	1.092727	0	0	Yes	12 Aug - 2014
Energy Solution LLC	5010	12" Power Cooling Fan	\$314.13	\$287.47	\$26.66	3	1.092727	0	0	Yes	07 Mar - 2014
Almand Bros Inc	IV00096181	16 Portable Light Towers	\$80,072.72	\$73,277.88	\$6,794.84	3	1.092727	0	0	Yes	14 Oct - 2014
Pacific Building Materials Inc	0004432	3/4" x 4 x 8 Plywood	\$5,076.46	\$4,645.68	\$430.78	3	1.092727	0	0	Yes	16 Dec - 2014

ACE AUTO GLASS

HONOLULU: 2260 Kalia Highway (330) 647-5217
 WAIPAHUA: 919 Kaimanu Street (330) 599-2366
 PEARL CITY: 96-020 Moanalua Road (330) 489-2821
 KAHULUI: 148 Kilauea Avenue (330) 677-7921
 LIMA: 3016 Pele Street, Suite 2 & 3 (330) 240-0994
 HILO: 871 Kilaheua Avenue (330) 936-4952
 KONA: 7540A5 Kailash Street, Box 1-145 (330) 320-0023
 KAUAI: 122 P. Hanalei Hwy, Suite 100 (808) 648-4330

INVOICE # 1418157
 DATE: 1/23/2014
 TIME: 11:00 AM

TO: KIEWIT INFRASTRUCTURE WEST CO.
 JOB #13186
 KAPOLEI, HI 96707

CONFIRMED BY: KYLE 321-5112
 321-5112
 KAPOLEI, HI 96707

Contactor provides electronic invoices for each billed item. Invoices are reviewed for correct amounts in the Undefined Spreadsheet, potential doubling billings, and for non-conformances to the Undefined Consumable Escalation Agreement

1	LAM (RE)	LAMINATED 30 X 36 X 1 1/2" (DOOR)	\$157.60	\$126.00	\$126.00	Sub Total	\$470.36
1	LABOR	LABOR TO REPLACE	\$150.00	\$150.00	\$150.00	Tax:	\$22.16
1	LABOR	LABOR TO CUT	\$20.00	\$20.00	\$20.00		
1	LABOR	LABOR TO REPLACE WINDSHIELD	\$150.00	\$150.00	\$150.00		
1	LABOR	LABOR TO REPLACE	\$25.00	\$25.00	\$25.00	Account	\$492.46

WOFH Escalation Summary for Provisional Sum Change Orders

NUMBER	CATEGORIES	Original KIWC Estimate	Original HART Estimate	KIWC Expended Costs Through June, 2015	HART Forecast From July 1, 2015 to July 1, 2016	Total Escalation Forecast
1	Staff Labor	\$2,769,856	\$2,000,000	\$2,813,369	\$1,081,101	\$3,894,470
2	Craft Labor	\$9,186,621	\$5,000,000	\$5,409,444	\$3,245,848	\$8,655,292
3	Fuel, Oil, & Grease (FOG)	\$2,670,530	\$2,000,000	(\$250,540)	(281,531)	(\$532,071)
4	Concrete	\$6,092,167	\$3,000,000	\$2,633,150	\$1,137,995	\$3,771,145
5	Small Tools and Supplies - Consumables	\$14,713,544	\$10,500,000	\$7,451,221	\$3,189,810	\$10,641,031
6	Sub Total – Provisional Sum Costs	\$35,432,718	\$22,500,000	\$18,056,644	\$8,373,223	\$26,429,867
7	Administrative Costs	Included	Included	\$253,004	\$67,129	320,133
8	Total – Provisional Sum Costs	\$35,432,718	\$22,500,000	\$18,309,648	\$8,440,352	\$26,750,000

Total cost for Provisional Sum including Staff Preparation of billing is \$26,750,000. A cost difference of \$8,682,718 or 75.5% of the Kiewit requested amount of \$35,432,718

Delay Escalation Summary

Original Requested Escalation Amount:	\$ 63,357,195
Removed escalation for HNTB:	<u>(8,247,966)</u>
Revised escalation request:	<u>\$ 55,109,229</u>
Total Escalation Settled:	
Escalation settled by change order (lump sum)	\$ 10,052,696
Escalation cost paid under provisional sum change order 48	15,000,000
Escalation cost to be paid under second provisional sum change order	<u>11,750,000</u>
Total estimated escalation excluding HNTB	<u>\$ 36,806,696</u>

A cost difference of \$18,306,533 or 66.8% of the revised requested amount

Questions

Mahalo!



H O N O L U L U R A I L T R A N S I T P R O J E C T

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